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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,823	03/03/2004	Hisashi Yoshida	HITA.0523	1504

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EXAMINER

NGUYEN, THANH NHAN P

ART UNIT PAPER NUMBER

2871

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,823

Applicant(s)

YOSHIDA, HISASHI

Examiner

(Nancy) Thanh-Nhan P. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9,10,12,13 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,11,14-16,18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/4/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Species I, sub-species A (fig. 1) as recited in claims 1-19 in the reply filed on 8/4/2005 is acknowledged.
2. Claims 9-10, 12-13 and 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, which do not read on sub-species A (fig. 1) as claimed by applicant, and there being no allowable generic or linking claim. Thus, claims 1-8, 11, 14 and 18-19 are object to examination at this time.

Drawings

Figures 9-12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 18-19 are objected to because of the following informalities:

The term "substantially straight" in claims 18-19 is a relative term, which renders the claim indefinite. The term "substantially straight" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the

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invention. Therefore, for the examination purpose, the term "substantially straight" will be interpreted as a line, which has at least one bending portion, and has been examined accordingly.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5, 11 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Narutaki et al U.S. Patent No. 6,624,860.

Referring to claim 1, Narutaki et al discloses a liquid crystal display device comprising: a pair of substrates (1 , 2); a liquid crystal layer (5) which is sandwiched between the pair of substrates; a large number of pixels (3) which are arranged in a matrix array; and color filters (11); wherein, a color filter forming region (11) and a color filter non-forming region (J1 , J2) are formed within a lighting region which is visible to a viewer in the inside of one pixel, and further, in the inside of one pixel, a first side of the lighting region includes both of the color filter forming region and the color filter non-forming region (J1), a second side of the lighting region which faces the first side in an opposed manner includes both of the color filter forming region and the color filter non-

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forming region (J2), the first side assumes the color filter non-forming region at a region which faces the color filter forming region of the second side in an opposed manner, and the second side assumes the color filter non-forming region at a region which faces the color filter forming region of the first side in an opposed manner, [figs. 1A, 1B & 12A].

Referring to claim 3, Narutaki et al discloses a liquid crystal display device according to claim 1, wherein, in the inside of one pixel, respective portions of the first side and the second side which face each other in an opposed manner include at least portions of regions which constitute the color filter non-forming regions, [fig. 12A].

Referring to claim 4, Narutaki et al discloses a liquid crystal display device according to claim 1, wherein the lighting region is a region where the pixel electrode is formed, [figs. 1A; 12A].

Referring to claim 5, Narutaki et al discloses a liquid crystal display device according to claim 4, wherein the lighting region is a region where the pixel electrode is formed, the first side is one side out of sides of the pixel electrode, and the second side is another side of the pixel electrode which faces one side of the pixel electrode in an opposed manner, [fig. 12A].

Referring to claim 11, Narutaki et al discloses a liquid crystal display device according to claim 1, wherein switching elements for selecting the pixels are formed on the substrate which faces the substrate on which the color filters are formed in an opposed manner, [fig. 1B; col. 3, lines 15-21].

Claim 18 is met the discussion regarding claim 1 rejection above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narutaki et al (US 6,624,860) in view of Chang et al U.S. Patent Application Publication No. 2003/0020852.

Referring to claims 6-8, Narutaki et al lacks disclosure of a liquid crystal display device according to claim 1, wherein the lighting region is an opening region formed in a black matrix; the first side is one side out of sides of the black matrix, and the second side is another side of the black matrix which faces one side of the black matrix in an opposed manner while sandwiching the color filter therebetween; and wherein the black matrix is formed on the substrate on which the color filters are formed.

Chang et al discloses a liquid crystal display device wherein the lighting region is an opening region formed in a black matrix; the first side is one side out of sides of the black matrix, and the second side is another side of the black matrix which faces one side of the black matrix in an opposed manner while sandwiching the color filter therebetween; and wherein the black matrix is formed on the substrate on which the color filters are formed, [fig. 1; par. 0010]; wherein the black matrix is for preventing a light leakage between pixels in the liquid crystal display device, [par. 0010]. Therefore,

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at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have the lighting region is an opening region formed in a black matrix, wherein the black matrix is for preventing a light leakage between pixels in the liquid crystal display device.

Claim 14 is met the discussion regarding claims 8 and 11 rejection above.

Claim 19 is met the discussion regarding claim 8 rejection above.

Allowable Subject Matter

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The claim is allowable over the prior art of record because none of the references, either alone or in combination, discloses or renders obvious a liquid crystal display device according to claim 1, wherein the color filter has shapes which intersect the first side and the second side obliquely at portions where the color filter forming region and the color filter non-forming region are changed over.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Narutaki et al U.S. Patent No. 6,624,860.

Chang et al U.S. Patent Application Publication No. 2003/0020852.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Nancy) Thanh-Nhan P. Nguyen whose telephone number is 571-272-1673. The examiner can normally be reached on M-F/9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

(Nancy) Thanh-Nhan P Nguyen
Examiner
Art Unit 2871
-- October 14, 2005 --

TN


ANDREW SCHECHTER
PRIMARY EXAMINER